



Generation Y 2001-2002 Evaluation Data

Prepared for **Generation YES** by the **Northwest Regional Educational Laboratory**

This report includes data from the following schools:

bigchalk Alaska Schools

Brevig Mission School, Bering Strait School District Tri Valley School, Denali Boro School Distirct

Generation Y Evaluation Results

On the following pages you will find a report containing data from the Generation Y classes in your area. Depending on how your Generation Y classes are funded, the data may be from a single school, an entire district or state, or some other grouping of schools. These data have been prepared for you by the Evaluation Program of the Northwest Regional Educational Laboratory (www.nwrel.org/evaluation), as part of the service provided to your schools by Generation YES.

The information in this report comes from several sources, all collected online through the Generation Y web site. The report contains tabulations of results from the following online data collection forms:

- Surveys of participating students at the beginning and end of each class
- Project descriptions completed by participating students during each class
- Reports from Generation Y Coordinating Teachers at the end of each class
- Surveys of Generation Y Partner Teachers at the end of each class

We hope you find this information interesting and useful. Generation Y is aimed at helping you integrate technology in your classrooms, while engaging students in meaningful educational activities that support teachers, other students, administrators, and your community. The data presented here should give you a snapshot of what your students and teachers have been doing in their Generation Y classes and projects, and how well these activities are supporting technology integration and student engagement in your schools.

An additional report summarizing data on Generation Y classes across the nation is also available. By comparing national data to the information from your area, you may be able to notice differences, strengths, or weaknesses in your local schools that are of interest.

Overview of Generation Y

Generation Y is a program which uses partnerships between students and teachers to integrate modern computer technologies into the classroom. The program promotes the effective use of educational technology in schools, develops opportunities for student leadership, and fosters a collaborative, learning community atmosphere in schools. Rather than teaching technology skills to teachers and hoping they will use these skills to improve their students' learning, Generation Y trains students to form working partnerships with teachers in order to improve teaching and learning in their schools. Students become agents of change, assuming responsibility for helping to improve the educational resources available to themselves and their classmates.

GenY students learn technology skills with an emphasis on applying these skills to a real-world problem: helping teachers use technology to deliver more effective lessons. Students and partner teachers learn how telecommunications tools, the Internet, digital imaging and presentation tools, and other technologies can enhance lesson plans and curriculum units. Many Generation Y students and partner teachers also learn about their state academic standards and learning goals, and the process of aligning classroom activities with these goals.

Each GenY student is paired with a partner teacher (or an administrator, librarian, counselor or other educator), who decides what lesson plan, curriculum unit, or other school need will be addressed by a collaborative, technology-enriched curriculum project, which the partner teacher and the GenY student produce together. These projects are then used in the partner teacher's regular classroom, or in the library, administrative offices, etc. Through this model, participating educators receive individualized support as they strengthen their use and integration of new technologies. Students learn technology, communication, collaboration, and project management skills in an authentic, personally meaningful context, and many go on to further extend their skills through advanced school or community service projects.

The program was developed in the Olympia, Washington School District, with a five-year award in 1996 from the U.S. Department of Education's Technology Innovation Challenge Grant program. Numerous state and local grants as well as corporate sponsorships have also supported the development of the instructional model and materials, as well as dissemination of the model to schools outside Olympia. Currently, Generation Y classes are provided through the Generation YES organization to schools nationwide. The program provides a model which can be customized to fit a wide range of grade levels, technology infrastructures, scheduling requirements, interests, and skill levels of participants. In the summer of 2000, the program was awarded "Exemplary" status by the department's Expert Panel on Educational Technology, a distinction given to only two of 134 programs.

Data from the nationwide project indicate that the program can be an effective alternative for schools wishing to integrate technology into their regular curriculum and increase their use of project-based, student-centered learning practices. The model provides individualized support for educators who wish to increase their use of technology without becoming distracted from the essence of their jobs -- building and delivering effective curriculum units and lesson plans. Generation Y achieves this by giving students experience with educational technology, communication skills, and information literacy, then allowing students to act as responsible partners with their teachers in building new curriculum materials and new teaching and learning practices.

Participating teachers and students have consistently reported that their involvement in Generation Y afforded them an excellent opportunity to improve their basic technology skills, and to develop more advanced abilities to integrate technology in standards-based lessons, projects and curriculum units. Both teachers and students have reported that they gained meaningful, authentic experience developing skills in technology use, collaboration, project management, and information literacy, while contributing to the improvement of their schools. Most have found the Generation Y model to be an effective professional development strategy for teachers, as well as an effective approach to increasing student engagement, student learning, and student leadership.

For those unfamiliar with the program, the term "partner-teacher" is used to refer to the classroom teachers who are each paired with a Generation Y student. These teams collaborate in the production and delivery of a lesson plan or unit, using modern telecommunications technology, to the teacher's class. The term "Generation Y teacher" or "Generation Y coordinating teacher" refers to the teacher who works with all Generation Y students in a school, as they learn skills and knowledge through the course activities and design their projects with partner teachers. The GenY teacher also helps coordinate the relationships between the Generation Y students and their partner teachers, and facilitates the process of developing the collaborative projects. The core of the model is the

Generation Y class and the collaborative projects which GenY students and their partner teachers produce for students in the partner teachers' class, as depicted in figure 1.

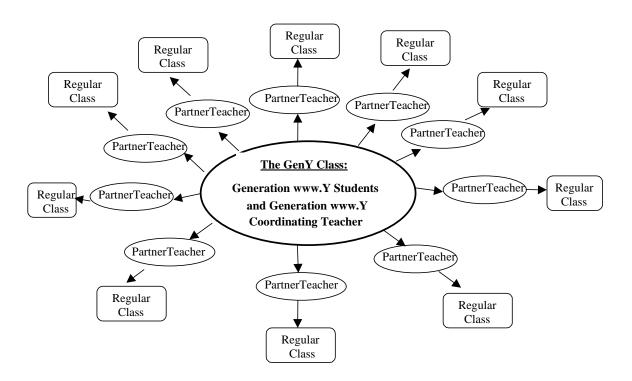


Figure 1. The Generation Y Class

Generation YES provides fully participating schools with the following:

- A training workshop for the Generation Y teacher(s) and selected students
- Course materials, including curriculum guides, student workbooks, videos, CDs, etc.
- Access to online resources and consultants for the development of student projects
- Access to the searchable database of previous student projects
- Data collection and reporting services to monitor program outcomes

The program includes a series of online surveys and online project documentation facilities for Generation Y teachers, Generation Y students, and the Partner Teachers who work with the Generation Y students. Data from these sources, collected during the 2001-2002 school year, are presented in the tables on the following pages.

Generation Y Coordinating Teacher Reports

At the close of each Generation Y class, teachers are asked to complete an online report that includes questions about the collaborative projects involving their students and partner teachers from their school, the technical and administrative infrastructure in their school, and their ratings of the usefulness of the GenY model, curriculum components, online services, etc. The tables in this section provide a

Table 1 Average Numbers of Generation Y Students and Collaborative Projects

Generation Y Teacher Survey Question	Average in classes
How many students completed your GenY class?	5.7
How many collaborative projects were begun by your students?	6.3
How many projects were completed?	6.3
How many projects were delivered to a partner teacher's class?	6.3

Table 2
Difficulty of Managing Collaborative Partnerships and Projects

	Very Difficult	Difficult	ОК	Easy	Very Easy
How difficult was it to find partner teachers interested in participating?	0.0	0.0	33.3	33.3	33.3
How difficult was it to make good matches between those teachers and your Generation Y students?	0.0	33.3	0.0	33.3	33.3
How difficult was it to nurture and manage the working partnerships between your GenY students and their partner teachers?	0.0	0.0	66.7	0.0	33.3
How difficult was it to adjust the class for students and partner teachers with varying levels of expertise with computers?	0.0	0.0	66.7	0.0	33.3

(percentages of approximately 3 reporting)

Table 3
Infrastructure and Administrative Context

	Strongly Agree	Mostly Agree	Mixed	Mostly Disagree	Strongly Disagree
The computer and network infrastructure at our school is adequate.	0.0	100.0	0.0	0.0	0.0
Students have adequate permissions and privileges to use our computer and network resources, e-mail, and the Internet.	33.3	33.3	33.3	0.0	0.0
Our teachers are enthusiastic about the Generation Y model, in which they work in partnership with students to create curriculum and instruction materials and projects for other students to use.	33.3	66.7	0.0	0.0	0.0
The schedule and administrative structure and processes at our school are flexible enough to allow creative and varied collaboration between students and teachers.	66.7	33.3	0.0	0.0	0.0
Generation Y is viewed in our school as a serious professional development and technical support model for teachers who want to integrate technology in their classrooms.	0.0	33.3	33.3	33.3	0.0
Generation Y projects are used to support other special initiatives in our school aimed at technology integration, professional development or curriculum development.	66.7	0.0	33.3	0.0	0.0

(percentages of approximately 3 reporting)

Table 4
Generation Y Teacher Ratings of Success and Impact

	Strongly Agree	Mostly Agree	Mixed	Mostly Disagree	Strongly Disagree	No Opinion
The GenY model is a good way to help teachers integrate technology in their classrooms.	33.3	66.7	0.0	0.0	0.0	0.0
The GenY model is a good way to make school more engaging and meaningful to students.	33.3	33.3	33.3	0.0	0.0	0.0
The GenY model is a good way for students to learn technology skills.	66.7	33.3	0.0	0.0	0.0	0.0
The GenY model is a good way for students to practice solving real-world problems.	33.3	33.3	0.0	33.3	0.0	0.0
The GenY training I received was adequate to prepare me to teach this course.	0.0	33.3	0.0	33.3	0.0	33.3
The GenY central office staff has been responsive and helpful when I have requested assistance.	66.7	33.3	0.0	0.0	0.0	0.0
The GenY Curriculum Guide has been very useful to me in delivering the course.	100.0	0.0	0.0	0.0	0.0	0.0
The GenY Student Workbook has been very useful to me in delivering the course.	33.3	33.3	0.0	0.0	0.0	33.3
The GenY CD has been very useful to me in delivering the course.	66.7	0.0	33.3	0.0	0.0	0.0
The GenY Video has been very useful to me in delivering the course.	0.0	33.3	33.3	0.0	33.3	0.0
The GenY Website has been very useful to me in delivering the course.	66.7	0.0	33.3	0.0	0.0	0.0
The GenY online system for registering schools, teachers, classes and students has been easy to use.	100.0	0.0	0.0	0.0	0.0	0.0
The GenY online Classroom Management tools have been easy to use and helpful to me in delivering the course.	66.7	33.3	0.0	0.0	0.0	0.0
The GenY online Project Proposal, Feedback and Final Report system for students has been easy to use and helpful to me in delivering the course.	33.3	66.7	0.0	0.0	0.0	0.0
The online Archive of GenY collaborative projects has been easy to use and helpful to me in delivering the course.	33.3	66.7	0.0	0.0	0.0	0.0
We will continue to offer Generation Y classes at our school in the future.	33.3	0.0	66.7	0.0	0.0	0.0
I would be willing to serve as a trainer for teachers in my region who want to begin Generation Y programs in their schools.	33.3	33.3	0.0	0.0	0.0	33.3

(percentages of approximately 3 reporting)

Student Preliminary Survey Results

Students complete a preliminary survey when they register for the the Generation Y class. The survey includes demographics as well as questions about access to computers and the internet, current skill levels and prior use of digital tools. This information is summarized in the next set of tables.

Table 5
Participating Generation Y Students by Gender

Gender	Percentage of Students (of 28 reporting)
Male	53.6
Female	46.4

Table 6
Participating Generation Y Students by Ethnicity

Ethnicity	Percentage of Students (of 28 reporting)
Caucasian	32.1
African American	0.0
Hispanic	0.0
Asian	0.0
Pacific Islander	0.0
Native American/Native Alaskan	67.9
Other	0.0

Table 7
Computer Access at Home by Generation Y Students

At home do you have access to:	Yes	No
A computer	38.5	61.5
The Internet	40.0	60.0
Send and receive email	38.5	61.5

(percentages of approximately 29 reporting)

Table 8
Frequency of Computer Use by Generation Y Students at Home and School

How often do you use a computer?	Almost every day	At least once a week	Once or twice a month	Once or twice a semester	Never or don't have access
At home	44.4	11.1	0.0	0.0	44.4
At school	92.9	3.6	3.6	0.0	0.0

(percentages of approximately 26 reporting)

Table 9
Student Experience With Computer and Technology Prior to Participating in Generation Y

How much experience have you had with the following:	None	Just a little	Some	A lot
Use word processing software	25.0	17.9	14.3	42.9
Search the Internet	3.6	10.7	10.7	75.0
Send and receive email	3.6	7.1	10.7	78.6
Use PowerPoint or other presentation software	46.4	28.6	17.9	7.1
Troubleshoot basic computer problems	39.3	28.6	17.9	14.3
Use a scanner to digitize a picture	39.3	14.3	25.0	21.4
Use a digital camera	21.4	25.0	25.0	28.6
Create a web page or web site	40.7	18.5	18.5	22.2
Touch-typing at least 15 words/minute	17.9	32.1	17.9	32.1

(percentages of approximately 28 reporting)

Table 10 Frequency of Computer Use in Classes

In the classes you took last semester/quarter, how often were computers used by you or your teachers?	Computers were never used	Computers were used once	Computers were used a few times	Computers were used about once per week	Computers were used several times per week
Math	51.9	11.1	18.5	3.7	14.8
Language Arts, Reading or English	18.5	3.7	11.1	18.5	48.1
Science	46.4	7.1	17.9	25.0	3.6
Social Studies, Geography or History	38.5	3.8	19.2	23.1	15.4

(percentages of approximately 27 reporting)

Student Outcomes

Just before the class is over, students are prompted to complete a second online survey. Questions include how much practice students gained in various skill areas, what kind of collaborative projects were built, and how students rated their projects on several dimensions. The tables below summarize the outcomes reported by students.

Table 11
Practice Gained in Computing Skills by Generation Y Students

During your work this semester as a Generation Y student, how much practice and experience did you get:	None, I didn't do this at all	Just a little; 2 hours or less	Some; 2 to 10 hours	Quite a bit; 10 to 20 hours total	A lot; more than 20 hours total
Using a keyboard to touch-type at least 15 words/min	7.4	29.6	29.6	18.5	14.8
Using word processing software	7.4	40.7	23.1	14.8	18.5
Searching the Internet	0.0	33.3	25.9	22.2	18.5
Sending and receiving e-mail	0.0	37.0	22.2	18.5	22.2
Using PowerPoint or other presentation software	3.7	37.0	22.2	18.5	18.5
Troubleshooting basic computer problems	33.3	40.7	14.8	7.4	3.7
Using a scanner to digitize a picture	3.7	44.4	25.9	14.8	11.1
Using a digital camera	0.0	48.1	29.6	7.4	14.8
Creating a Web page or Web site	14.8	33.3	22.2	18.5	11.1

(percentages of approximately 27 reporting)

Table 12
Types of Collaborative Projects Built By Students and Partner Teachers

Project Type	Percentage of Projects that included this component:	Percentage of projects that were mainly focused on this component:
GenY student created or updated a Web page that was used by my partner teacher's class	52.0	8.0
GenY student helped other students search the Web for information on a class topic	60.0	8.0
GenY student developed an educational presentation using PowerPoint, HyperStudio, or other software	84.0	12.0
GenY student taught technology skills to a teacher	68.0	20.0
GenY student taught technology skills to other students	80.0	36.0
Other	36.0	16.0

(percentages of approximately 25 reporting)

Table 13
Delivery of Collaborative Projects

	Only Me	Only my Partner Teacher	Both of Us Together
When the lesson was delivered to your partner-teacher's class, who taught the class that day?	31.6	15.8	52.6

(percentages of approximately 19 reporting)

Table 14 Student Self-Assessments of Their Collaborative Projects

Mark the answer that best describes your experience in Generation Y:	Strongly Agree	Agree	Disagree	Strongly disagree	Not sure, N/A
I completed my project.	51.9	29.6	0.0	3.7	14.8
I am proud of my project.	51.9	37.0	3.7	3.7	3.7
As a result of my project, other students learned about technology.	33.3	44.4	3.7	0.0	18.5
As a result of my project, other students learned about a subject (e.g. history, math, English, etc.)	25.9	25.9	11.1	7.4	29.6
The feedback about my project proposal I got online was helpful.	29.6	22.2	7.4	0.0	40.7
My partner-teacher's expectations of me were clear and realistic.	25.9	51.9	3.7	0.0	18.5
My partner-teacher was able to meet with me regularly.	25.9	55.6	11.1	0.0	7.4
My partner-teacher and I worked together well as a team.	33.3	44.4	7.4	3.7	11.1
Overall, Generation Y was a good experience.	46.2	38.5	7.7	3.8	3.8

(percentages of approximately 26 reporting)

Partner-Teacher Outcomes

At the end of each Generation Y class, participating Partner Teachers are asked to complete a survey about their experiences working with a GenY student on a collaborative, curriculum-building project. Partner teachers are asked about changes in their attitudes and use of technology, the amount of time spent on their projects, and their ratings of a number of dimensions related to the new curriculum units or lesson plans. Their responses are summarized in the tables below, along with a listing of the project titles.

Table 15
Self-Assessed Change In Computer Use by GenY Partner Teachers

How has the frequency of the following changed as a result of your involvement with Generation Y?	More Frequently	Same Frequency	Less Frequently
You use computers to prepare for class, maintain class records, or do other school-related work.	56.3	43.8	0.0
You use computers for personal business, learning, or fun.	12.5	87.5	0.0
You use e-mail.	20.0	80.0	0.0
You use the World Wide Web.	25.0	75.0	0.0
Your students use computers during your classes.	56.3	43.8	0.0
Your students use computers outside of class to complete assignments for your class.	37.5	62.5	0.0

(percentages of approximately 16 reporting)

Table 16 Self-Assessed Change In Partner Teachers' Comfort Using Technology

How has your comfort level with the following changed as a result of your	More	Same level	Less
involvement with Generation Y?	comfortable	of comfort	comfortable
Using computers	50.0	50.0	0.0
Integrating computers into the curriculum	75.0	25.0	0.0
Helping students use computers	62.5	37.5	0.0
Using e-mail	13.3	86.7	0.0
Using the World Wide Web	7.7	92.3	0.0

(percentages of approximately 16 reporting)

Table 17
Time Spent by Partner Teachers on Collaborative Projects

	2 hrs or	3-5	5-8	> 8
	less	hours	hours	hours
Partner Teachers: How much time, in total, did you spend working with your GenY student this semester?	25.0	18.8	18.8	37.5

(percentages of approximately 16 reporting)

Table 18
Partner Teacher Evaluations of the Generation Y Experience

Please indicate your level of agreement with each of the following:	Strongly Agree	Agree	Disagree	Strongly Disagree
My student-partner completed his or her project.	56.3	25.0	12.5	6.3
My student-partner's project was of high quality.	31.3	43.8	18.8	6.3
I will use the lesson/Web page/presentation with which my student-partner helped in the future.	20.0	53.3	20.0	6.7
I would like to continue developing or refining this project in the future.	25.0	62.5	12.5	0.0
Choosing a project was relatively easy.	53.3	40.0	6.7	0.0
My role as a partner-teacher was clear to me.	50.0	25.0	25.0	0.0
As a consequence of Generation Y, I learned more about technology.	31.3	50.0	18.8	0.0
As a consequence of Generation Y, my students learned about technology.	68.8	25.0	6.3	0.0
As a consequence of Generation Y, my students learned about some content area.	33.3	53.3	13.3	0.0
Generation Y is a good method for providing support and assistance to teachers as they integrate technology into their classes.	56.3	37.5	6.3	0.0
My experience in Generation Y this semester will change the way I teach some lessons in the future.	56.3	37.5	6.3	0.0
I would like to work with another Generation Y student in the coming year.	37.5	50.0	12.5	0.0
I will continue rebuilding my lesson plans to make more use of educational technology.	40.0	53.3	6.7	0.0

(percentages of approximately 16 reporting)

Table 19
Partner Teacher Attitudes Toward Educational Computing

					Due to my experience with Generation Y, I:		
Please rate your opinions regarding the use of technology in education:	Strongly Agree	Agree	Disagree	Strongly Disagree	Agree more than before	Agree less than before	Haven't changed my opinion
I see definite benefits to students from integrating technology into education.	68.8	31.3	0.0	0.0	64.3	0.0	35.7
Technology facilitates positive changes in classroom teaching and learning practices.	62.5	37.5	0.0	0.0	57.1	0.0	42.9
I want to learn more about using new technologies.	60.0	40.0	0.0	0.0	46.2	0.0	53.8

(percentages of approximately 16 reporting)

Project List

Table 20 Archived Collaborative Projects

School	Partner-Teacher	Project Name
Brevig Mission School	Betty Fields	Ice Fishing PowerPoint
Brevig Mission School	Brian Marvin	PowerPoint Presentation: Native Plants
Brevig Mission School	Carolyn Rains	Science Fair Webquest
Brevig Mission School	Cynthia Shidner	Elementary Electronic Class Portfolio
Brevig Mission School	Elizabeth Hornbuckle	Geometry Through the Eyes of a Math Student
Brevig Mission School	Elizabeth Hornbuckle	Spanish WebQuest
Brevig Mission School	Eric Rains	Alaskan Animals with Sounds Using PowerPoint
Brevig Mission School	Ginger Crockett	iMovie: Manners in Inupiat
Brevig Mission School	Ginger Crockett	Kidspiration
Brevig Mission School	Kari Martin	Kidspiration With Second Graders
Brevig Mission School	Linda Beyer	SFA Reading Video for Topics
Brevig Mission School	Linda Beyer	Sharing Success Through Tech Generated Publications
Brevig Mission School	Liz Hornbuckle	Problem Solving in Mathematics with PowerPoint
Brevig Mission School	Renee Olanna	Digital Photography
Tri Valley School	Arlie Swett	PowerPoint Presentation on Educational Standards for the State Board of Educators
Tri Valley School	Dorathy Deblauw	Classroom Sports Using PDA's and Spreadsheets
Tri Valley School	Dorothy Deblauw	Magic Squares with PDA's
Tri Valley School	Jerry Koetje	Digital Pictures and iMovies
Tri Valley School	Mr. Brian Swett	Creating Basic Web Pages
Tri Valley School	Mr. Stephen Castor	Creating a Multimedia Presentation to Collaboratively Present a Science Project
Tri Valley School	Mr.Mark Jordan	Editing Digital Photos and Movies
Tri Valley School	Mrs. Craig and Mrs. DeBl	Story Time with iMovie
Tri Valley School	Mrs. Craig, Mrs. DeBlau	Metric Conversions-PDA's
Tri Valley School	Mrs. Craig, Mrs. Deblauw	Recording Animal Cracker Data Using PDA's